Vol. 88 Nos. 1–3

TOXICOLOGY

March 11th, 1994

CONTENTS

Cited in: Biological Abstracts, Cambridge Scientific Abstracts, Chemical Abstracts; Current Contents/Life Sciences Excerpta Medica (EMBASE); Environmental Mutagene Information Center; Environmental Periodicals Bibliography; Index Medicus

Publisher's Announcement ..... v–vi

Review Article

A review of axonal transport of metals
B. Arvidson (Uppsala, Sweden) 1–14

Induction of respiratory hypersensitivity to diphenylmethane-4,4′-diisocyanate (MDI) in guinea pigs. Influence of route of exposure **(Dermal application of the allergen more effectively produces respiratory hypersensitivity than atmospheric exposure)**
N.J. Rattray, P.A. Botham, P.M. Hext, D.R. Woodcock, I. Fielding, R.J. Dearman, I. Kimber (Macclesfield, UK) 15–30

Dose-response relationship for rat liver DNA damage caused by 49 rodent carcinogens **(Dose-response curves fit a linear model well and a quadratic one even better)**
K.T. Kitchin, J.L. Brown (Research Triangle Park, NC) 31–49

In vitro exposure of tracheobronchial epithelial cells and of tracheal explants to ozone **(The system allows exposure under controlled and highly reproducible concentrations of ozone)**
B.K. Tarkington, R. Wu, W.-M. Sun, K.J. Nikula, D.W. Wilson, J.A. Last (Davis, CA) 51–68

Transforming growth factor beta-induced tolerance to cadmium cytotoxicity in cultured vascular endothelial cells **(Tolerance may primarily be due to a prevention of intracellular CD accumulation)**
T. Kaji, S. Ohkawara, C. Yamamoto, M. Sakamoto, H. Kozuka (Kanazawa and Toyama, Japan) 69–79

Sensory irritation, pulmonary irritation and structure-activity relationships of alcohols **(The pulmonary effects of various alcohols are correlated to their physico-chemical properties and a theoretical basis is given for LTV)**
L.F. Hansen, G.D. Nielsen (Copenhagen, Denmark) 81–99

Induction of poly(ADP-ribosyl)ation in the kidney after in vivo application of renal carcinogens **(There is a temporal relationship between DNA double strand breaks, ribosylation and renal carcinogenesis by certain carcinogens)**
J. McLaren, T. Boulikas, S. Vamvakas (Würzburg, Germany; Palo Alto, CA) 101–112

Comparison of in vivo and in vitro rat hepatic toxicity of coumarin and methyl analogues, and application of quantitative morphometry to toxicity in vivo **(Morphometry reveals a rank order for coumarins, which is altered by GSH depletion)**
L. Fernyhough, S.W. Kell, A.H. Hammond, N.W. Thomas, J.R. Fry (Nottingham, UK) 113–125

Cadmium induces apoptosis in a human T cell line **(Besides general cytotoxicity cadmium induces DNA fragmentation which seems to be dependent on biosynthesis of a particular protein)**
B. El Azzouzi, G. Th. Tsangaris, O. Pellegrini, Y. Manuel, J. Benveniste, Y. Thomas (Clamart, Neuilly-sur-Seine and Verneuil-en-Halatte, France) 127–139

Resistance of rat kidney mitochondrial membranes to oxidation induced by acute iron overload **(Iron dextran treatment does not damage the kidney even though there is an increase in lipid peroxidation)**
M. Galleano, S.M. Farre, J.F. Turrens, S. Puntarulo (Buenos Aires and La Plata, Argentina; Mobile, AL) 141–149

(*Contents continued on inside back cover*)

Printed in Ireland

This journal is printed on acid-free paper.

0300-483X(19940311)88:1/3;1-W

(*Contents continued from outside back cover*)

Acute *N*-(3,5-dichlorophenyl)succinimide nephrotoxicity in female Fischer 344 rats **(Female rats are more susceptible and the site of the renal lesion is gender dependent)**
G.O. Rankin, K.W. Beers, V.J. Teets, D.W. Nicoll, D.K. Anestis, P.I. Brown, R.-T. Wang (Huntington, WV) 151–164

An impurity present in some samples of SIN-1 oxidizes it to nitric oxide in anaerobic solutions **(SIN-1 appears not to react directly with hemoglobin)**
Y. Wang, L.G. Rochelle, H. Kruszyna, R. Kruszyna, R.P. Smith, D.E. Wilcox (Hanover, NH) 165–176

Exogenous glutathione attenuates the antiproliferative effect of buthionine sulfoximine **(The antiproliferative effect of BSO could be caused by inhibition of cystine uptake)**
Y.J. Kang (Grand Forks, ND) 177–189

Inter-individual variability of human hepatic glutathione *S*-transferase isozymes assessed by inhibitory capacity **(Using a substrate specific for one of the three GST isoenzymes activity in four of 17 samples is about 20-fold lower suggesting genetic variation)**
Y. Takamatsu, T. Inaba (Toronto, Canada) 191–200

Induction of serum borne immunomodulatory factors in B6C3F1 mice by carbon tetrachloride. Exposure to carbon tetrachloride produces an increase in B-cell number and function **(While exposure to CCl_4 appears to suppress T-cell dependent immune responses, it enhances the activity of B-cells)**
B. Delaney, N.E. Kaminski (Richmond, Virginia; East Lansing, MI) 201–212

Immunotoxicology

Evaluation of the effect of low-level 2,3,7,8-tetrachlorodibenzo-*p*-dioxin exposure on cell mediated immunity **(Low levels of TCDD decrease thymus weight and suppress PFC but not in vivo- or in vitro-generated CTL responses in mice)**
C.D. Hanson, R.J. Smialowicz (Chapel Hill and Research Triangle Park, NC) 213–224

Cytokine-mast cell interactions: relevance to IgE-mediated chemical allergy **(The role of cytokines in specific IgE-dependent mast cell sensitization is reviewed)**
J.W. Coleman, M.R. Holliday, R.J. Dearman, I. Kimber (Liverpool and Macclesfield, UK) 225–235

Contents of Journals Relating to Toxicology 237–239
Subject Index 241–243
Author Index 245
Instructions to Authors 247–248

For a full and complete Instructions to Authors,
please refer to *Toxicology,* Vol. 88, Nos. 1–3, pp. 247–248